IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

PEROXYCHEM LLC **CIVIL ACTION**

INNOVATIVE ENVIRONMENTAL NO. 14-6446

TECHNOLOGIES, INC., et al.

v.

MEMORANDUM

Padova, J. July 7, 2015

Defendant Innovative Environmental Technologies, Inc. ("IET") has moved for partial summary judgment under Federal Rule of Civil Procedure 56(a) on Count I of the Amended Complaint, which asserts a patent infringement claim pursuant to 35 U.S.C. § 271. The Motion presents the narrow question of whether a one-page abstract disclosed more than one year before a provisional patent application was filed constitutes a "printed publication" within the meaning of § 102(b) of the Patent Act. See 35 U.S.C. § 102(b). For the reasons that follow, we deny IET's Motion.

I. BACKGROUND

A. The Patent

On October 20, 2005, Dr. Philip A. Block and Dr. Richard A. Brown filed provisional application No. 60/728,626 with the United States Patent and Trademark Office (the "PTO"), which identified PeroxyChem's predecessor as the application's assignee. (Def.'s Ex. 1 at ITE 001617.) On August 31, 2010, the PTO granted United States Patent No. 7,785,038 ("the '038 Patent") entitled "OXIDATION OF ORGANIC COMPOUNDS." (Id.) The '038 Patent

¹ The '038 Patent identifies the assignee as FMC Corporation. (Def.'s Ex. 1 at IET 001617.) The parties agree that, prior to February 28, 2014, PeroxyChem was a division of FMC Corporation, operating as FMC Global Peroxygens.

contains thirteen claims in separate numbered paragraphs: one independent claim (Claim 1) and twelve dependent claims (Claims 2 through 13). (<u>Id.</u> at IET 001621.) The "Summary of the Invention" section of the '038 Patent refers to:

a method for remediation of soil, sediment, clay, rock, and the like . . . and groundwater (i.e., water found underground in cracks in spaces in soil, sand and rocks), process water (i.e., water resulting from various industrial processes) or wastewater (i.e., water containing domestic or industrial waste) contaminated with volatile organic compounds, semi-volatile organic compounds, pesticides or herbicides. In addition, it may be used to treat sludges, sands or tars.

(<u>Id.</u> at IET 001618.) The "Abstract" section of the '038 Patent refers to "[a]n improved method and composition for treating organic compounds present in soil, groundwater and other environments" that "involves the use of a composition comprising a solid state, water soluble peroxygen compound and zero valent iron." (<u>Id.</u> at IET 001617.) Similarly, Claim 1 describes "[a] method of oxidizing a contaminant present in an environmental medium, said method comprising contacting the contaminant with a composition comprising a water soluble persulfate compound and zero valent iron wherein the persulfate compound is a dipersulfate." (<u>Id.</u> at IET 001621.) Claims 2 through 13 provide additional limitations further defining separate method inventions. (<u>Id.</u>)

B. The ORTs-3 Conference and Scientific Committee

At some point in 2004, but before July 12, 2004, Dr. Brown authored an abstract of a technical paper (the "ZVI Abstract") describing a combination of persulfate compounds and zero valent iron that "could be effectively used to treat mixed contaminant plumes." (Def.'s Ex. 2; Def.'s Ex. 5 at IET 00419.) Dr. Brown intended to present these findings at the "Third Annual Conference on Oxidation and Reduction Technologies for In-Situ Treatment of Soil and Groundwater" (the "ORTs-3 Conference"), which was held in San Diego, California, from October 24 to October 28, 2004 and "brought together representatives from academia, research

institutions, and industry to exchange information, developments, and perspectives . . . about new and emerging remediation technologies." (Haselow Decl. ¶¶ 2-3; see also generally Def.'s Ex. 4.) While one individual involved with the Conference stated that the "central purpose" of the Conference "was to provide a forum for academics, members of research institutions, and industry representatives to share their ideas about new and emerging technologies in the environmental remediation field," (Haselow Decl. ¶ 9), Dr. Brown testified that the Conference was a commercial venture and "another potential revenue stream" for Dr. Hussain Al-Ekabi, the principal organizer of the Conference. (Brown Dep. at 14-15).

At the Conference sessions, presenters made either a "platform presentation," which was given before a live audience, or a "poster presentation," which was delivered more informally at display booths to interested attendees. (Clayton Decl. ¶¶ 8-10; Marley Decl. ¶¶ 8-10.) Each Conference participant who was interested in giving a presentation was required to submit to the ORTs-3 Conference's Scientific Committee an abstract of his or her proposed presentation. (Clayton Decl. ¶ 11; Haselow Decl. ¶ 4; Marley Decl. ¶ 11.) According to Dr. Brown, who served both as a member of the ORTs-3 Scientific Committee and as the ORTs-3 Conference Chair, abstracts were "very short," generally limited to one page, and were an "executive summary of the paper being presented." (Brown Dep. at 35, 49; Def.'s Ex. 4 at 00113.) As Chair, Dr. Brown was responsible for collecting all abstracts of technical papers submitted by ORTs-3 Conference presenters, and then forwarding the collected abstracts to Committee members for their review. (See generally Def.'s Ex. 5.)

On July 12, 2004, Dr. Brown sent the twenty-one members of the ORTs-3 Conference's Scientific Committee, including himself, and two other individuals an email stating that "[b]y

now you have all received several sets of abstracts for review." 2 (Id. at IET 00419; see also Def.'s Ex. 4 at IET 00113 (listing names of Committee members).) These Committee members represented a variety of firms and universities, including Siemens Corporation, Raytheon, United Technologies, Aquifer Solutions, ERM, Montgomery Watson, ReTec, the Colorado School of Mines, Washington State University, and the University of Waterloo. (Def.'s Ex. 4 at IET 00113; Def.'s Ex. 5.) Recipients of the ZVI Abstract also included one representative each from Redox Technologies, LLC ("an environmental remediation firm that specializes in in situ remediation of soil and groundwater contamination"); EnviroMetal Technologies; Xpert Design and Diagnostic, LLC; and representatives from the United States Army Corps of Engineers. (Def.'s Ex. 4 at IET 00113; Def.'s Ex. 5; Haselow Decl. ¶ 1.) There is no specific reference in this email to the ZVI Abstract having been distributed by email to any Committee members, and the ZVI Abstract is not attached to any of the emails Dr. Brown sent in July of 2014. (See generally Def.'s Ex. 5.) However, John Haselow, President of Redox Technologies, LLC and a member of the ORTs-3 Scientific Committee, averred that he received the emails and abstracts that Dr. Brown sent in July of 2004, and Dr. Brown testified that his recollection is that all members of the Scientific Committee "probably" received all of the abstracts. (Brown Dep. at 112; Haselow Decl. ¶ 16.)

Dr. Brown attached to his July 12, 2004 email a spreadsheet containing a list of the abstracts that the members had supposedly previously received from him. (Def.'s Ex. 5 at IET 00419-20.) One of the abstracts that is listed in this spreadsheet is the ZVI Abstract, which is entitled "Simultaneous Reduction and Oxidation: Combining Persulfate with Zero Valent Iron." (Def.'s Ex. 6 at 1; see also Def.'s Ex. 5 at IET 00419-20.) Based on the subject matter of each

 $^{^2}$ One of these individuals is Dr. Brown's administrative assistant, Regina Spence. (See Brown Dep. at 30.)

abstract, each presenter was assigned specific slots in one or more of the Conference's ten topically-organized sessions, one of which was a session entitled "Peroxygens - Peroxide and Persulfate." (Def.'s Ex. 6 at 1.) Dr. Brown's presentation of the ZVI Abstract was assigned to this session. (Id.)

Dr. Brown's email also provided Committee members with "Instructions for Abstract Review." (Def.'s Ex. 7; see also Def.'s Ex. 5 at IET 00419.) These Instructions began with a request that Committee members "[r]eview the [A]bstracts assigned to other sessions to determine if there are any that are of interest." (Def.'s Ex. 7 at IET 00064.) Furthermore, in his email, Dr. Brown asked the members to "review the [A]bstracts that are assigned to another primary session," and stated that if any of these Abstracts were of interest, the member should contact the appropriate session Chair to request that the presentation be transferred to the reviewer's session. (Def.'s Ex. 5 at IET 00420.) In the "Instructions," Dr. Brown also stated that the Committee members should "[c]reate ordered (descending order of preference) of abstracts for the session," and that he would "make final assignment based on the slots available using the ordered list." (Def.'s Ex. 7 at IET 00064.)

C. Information Available on Publically-Accessible Websites

On September 10, 2004, Dr. Al-Ekabi stated in an email that "[t]he final program of ORTs-3 is now on the web" at www.redoxtech.com. (Def.'s Ex. 8 at 1.) The final program identified each presenter's assigned session and slot, along with the full title of each abstract, including the ZVI Abstract. (Id. at 6-7.) Although no other specific information about the ZVI Abstract appeared in the final program, the program lists Dr. Brown and Dr. Block's names and employers directly below the title. (Id.) Dr. Brown testified that the program was, in fact, published on Dr. Al-Ekabi's website, and that it was on the website "probably at least a month or

more" before the start of the ORTs-3 Conference. (Brown Dep. at 125.)

By October 9, 2004, Dr. Brown's employer, ERM, Inc., announced on the homepage of its website that ERM representatives would be "[p]resenting 14 papers at the International ORTs-3 Conference." (Def.'s Ex. 9 at 1.) Additionally, the website's "media room" webpage provided a link to an October 8, 2014 press release publicizing ERM's involvement in the ORTs-3 Conference. (Id. at 2.) The linked text on that page summarized the release with the following text: "ERM shares its expertise on oxidation and reduction technologies." (Id.) The actual press release is not in evidence.

D. <u>The Scientific Committee's Review</u>

In his Declaration, Haselow averred that "[i]n reviewing the Abstracts submitted, [his] primary goal was to determine an appropriate schedule and order for each of the individual presentations. In conducting [his] review, [he] also wanted to make sure that none of the Abstracts were plainly 'junk science,' or merely disguised marketing presentations." (Haselow Decl. ¶ 11.) He additionally stated that he "did not review the Abstracts submitted under peer review standards, with which [he is] familiar." (Id. ¶ 12.) Similarly, ORTs-3 Scientific Committee members Wilson Clayton and Michael Marley averred that reviewers were "to determine if [the abstracts] were scientifically sound, not overly commercial, and suitable or interesting enough for presentation." (Clayton Decl. ¶ 12; see also Marley Decl. ¶ 13.) Clayton and Marley also stated that they reviewed the abstracts in order to determine presentation order and decide whether the proposed presentations were better suited for poster or platform presentations. (Clayton Decl. ¶ 13; Marley Decl. ¶ 12.) Additionally, Dr. Block, the co-inventor of the '038 Patent, testified at his deposition that, unlike papers that are published in academic journals, there is no "assumption of scientific validity" with respect to papers that are presented

at a conference. (Block Dep. at 265; Def.'s Ex. 1 at IET 001617.)

Haselow's, Marley's, and Clayton's Declarations also address the confidentiality of the Committee review process. Haselow averred that "[n]othing in any communications[] [between] the International Scientific Committee and the Abstracts' authors and presenters in any way stated, suggested, or implied that Abstracts submitted to the International Scientific Committee would be treated as confidential." (Haselow Decl. ¶ 8.) He further averred that, "[a]s a member of ORTs-3's International Scientific Committee who reviewed Abstracts, [he] never communicated with any of the Abstracts' authors regarding the content, methods, accuracy, or scientific validity of their individual submissions." (Id. ¶ 10.)

Marley, who co-chaired the session at which Dr. Brown presented the ZVI Abstract, averred that "[i]t is an unwritten rule at industry conferences[,] and it was [his] expectation when [he] submitted [his] abstract for review to the ORTs-3 Committee" that the Committee would keep the abstract confidential and "[the] abstract would not be disclosed to or accessible to anyone outside of the ORTs-3 Committee prior to the actual ORTs-3 Conference." (Marley Decl. ¶¶ 14, 19.) Marley further averred that "[t]he reason for this unwritten rule and why [he] expected [his] abstract to be kept confidential prior to the ORTs-3 Conference is that abstracts are incomplete documents that do not reflect the entirety of an author's ideas." (Id. ¶ 21.) Specifically, he averred that "[s]ometimes when an abstract is submitted[,] research is still ongoing" and he "would want to be the first to present and have control over how [his] ideas were presented to the industry." (Id.) Indeed, Marley's own practice was not to disclose the contents of abstracts under review to anyone outside of the Committee and to treat the abstracts as confidential. (Id. ¶ 22.)

Similarly, Clayton averred that, in his experience, "it is a general rule at industry

conferences, including the ORTs-3 Conference . . . that the abstract reviewers would keep the abstracts confidential and [would] not disclose the abstracts until the actual conference at which time the work outlined in the abstract would be presented by the author." (Clayton Decl. ¶ 13.) This is because "abstracts are preliminary;" "authors would not want the work in their abstracts disclosed before presenting that work because the ideas expressed in the abstracts may be incomplete;" and "authors would want to control how their work is presented and be the first to present that work." (Id. ¶ 14.) Clayton further averred his belief that "it would have been unethical for [him] to disclose any abstracts [he] reviewed to anyone who was not a member of the applicable conference committee," and that his own practice was to treat the abstracts as confidential. (Id. ¶ 15.) Both Clayton and Marley averred that they did not disclose or discuss the abstracts with anyone who was not on the ORTs-3 Committee, and that they never received a request outside of other Committee members to see any of the abstracts that were under review. (Id. ¶ 16; Marley Decl. ¶ 23.)

Dr. Brown testified at his deposition that he distributed the abstracts, including the ZVI Abstract, to the reviewers under a "tasit understanding" [sic] and "professional best practice" that they would be "held confidential." (Brown Dep. at 78.) This understanding was based on his participation in more than 100 professional conferences relating to the remediation of contaminants. (Id. at 16, 78-81.) Dr. Brown further testified that the rationale for the "tasit understanding" [sic] was to protect authors' ability to disseminate their work and inform the industry in the manner they prefer, since "[t]hat . . . is the privilege of the author." (Id. at 78.) Dr. Brown also testified, however, that he never informed the members of the Scientific Committee that the abstracts were confidential. (Id. at 113.)

Dr. Brown additionally testified that his approach to reviewing the abstracts was not "an

in-depth analysis" and that he "probably" looked "to some degree" to see whether the abstracts were "scientifically sound." (<u>Id.</u> at 44-45.) Rather, he testified that since Dr. Al-Ekabi's "interest in the [C]onference was a revenue stream," the understanding was that each abstract would be approved for either a platform or poster presentation, and he does not recall rejecting any abstracts. (<u>Id.</u> at 44, 51, 120.) Moreover, Dr. Brown testified that he never contacted any of the authors of the abstracts about their work and that he did not recall any other member of the Scientific Committee doing so either. (<u>Id.</u> at 54-55.)

James Mueller, President of Provectus Environmental Products, Inc. and a Defendant in this case, stated that he attended the ORTs-3 Conference but was not a member of the ORTs-3 Scientific Committee. (Mueller Decl. ¶¶ 1, 3-4.) At that time, he was President of Adventus Americas, Inc., "a remediation firm dedicated to the development and global commercialization of applied environmental biotechnologies." (Id. ¶ 2.) Mueller stated in his Declaration that, prior to the Conference, Dr. Brown asked him to co-chair one of the Conference sessions and "to review a series of abstracts to decide which topics would be presented in [Mueller's] session." (Id. ¶ 5.) In July 2004, approximately three months before the Conference, Dr. Brown provided Mueller with all of the abstracts that were being presented at the ORTs-3 Conference, including the ZVI Abstract. (Id. ¶¶ 6-7.) Mueller received these abstracts in his capacity as President of Adventus. (Id. ¶ 13.) He "understood that one of [his] jobs was to distribute and disseminate the abstracts to others in the environmental industry in order to encourage conference participation." (Id. \P 8.) This made sense to Mueller because "he knew that one of the central purposes of the [C]onference was to generate revenue for Dr. Hussain Al-Ekabi and his firm, Redox Technologies." (Id. ¶ 9.) Based on this understanding, at some point between July 2004 and the start of the Conference, Mueller emailed "the abstracts to several other members of the

environmental industry who were not members of the . . . Scientific Committee but were potential attendees at the conference." ($\underline{\text{Id.}}$ ¶¶ 10-11.) He had "no tacit or explicit understanding of any kind that these abstracts . . . were in any way subject to any restrictions or were to be considered confidential." ($\underline{\text{Id.}}$ ¶ 14.)

II. LEGAL STANDARD

Summary judgment is appropriate "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). An issue is "genuine" if "the evidence is such that a reasonable jury could return a verdict for the nonmoving party." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). A factual dispute is "material" if it "might affect the outcome of the suit under the governing law . . ." Id. In ruling on a summary judgment motion, we consider "the facts and draw all reasonable inferences in the light most favorable to the plaintiff, the party who opposed summary judgment." Lamont v. New Jersey, 637 F.3d 177, 179 n.1 (3d Cir. 2011) (citing Scott v. Harris, 550 U.S. 372 (2007)).

"[A] party seeking summary judgment always bears the initial responsibility of informing the district court of the basis for its motion, and identifying those portions of [the record] which it believes demonstrate the absence of a genuine issue of material fact." Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986). Summary judgment is appropriate if the nonmoving party fails to respond with a factual showing "sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial." Id. at 322.

"While the evidence that the non-moving party presents may be either direct or circumstantial, and need not be as great as a preponderance, the evidence must be more than a scintilla." Galli v. New Jersey Meadowlands Comm'n, 490 F.3d 265, 270 (3d Cir. 2007)

(quoting <u>Hugh v. Butler Cnty. Family YMCA</u>, 418 F.3d 265, 267 (3d Cir. 2005)). "Evidence that is merely colorable or not significantly probative is insufficient to create a genuine issue of material fact for trial." <u>West v. Lincoln Benefit Life Co.</u>, 509 F.3d 160, 172 (3d Cir. 2007) (citing <u>Anderson</u>, 477 U.S. at 248; and <u>El v. Se. Pa. Transp. Auth.</u>, 479 F.3d 232, 238 (3d Cir. 2007)).

III. DISCUSSION

Count I of the Amended Complaint asserts that "IET has infringed and continues to infringe the '038 Patent by practicing one or more of the methods claimed in the '038 [P]atent related to, inter alia, the treatment of organic compounds present in soil, groundwater, and other environments," in violation of 35 U.S.C. § 271. (Am. Compl. ¶¶ 43-44.) IET has moved for partial summary judgment on this claim on the ground that the '038 Patent is unenforceable under the Patent Act's one-year printed publication bar because the inventions in the '038 Patent were disclosed in printed form more than one year before Dr. Brown and Dr. Block filed the provisional application for the '038 Patent.

Pursuant to 35 U.S.C. § 102(b), "[a] person shall be entitled to a patent unless . . . the invention was . . . described in a printed publication . . . more than one year prior to the date of the application for patent in the United States." 35 U.S.C. § 102(b). Whether a particular document qualifies as a printed publication under § 102 is a question of law to be decided in light of the relevant facts. <u>In re Lister</u>, 583 F.3d 1307, 1311 (Fed. Cir. 2009). Although § 102 refers

³ Because the current version of 35 U.S.C. § 102 applies only to patents with effective filing dates on or after March 16, 2013, we rely on the previous version of the statute. <u>See</u> Pub. L. No. 112-29, § 3(n)(1), 125 Stat. 284, 293 (2011) (amended 2014).

⁴ When "precise issue[s] pertain[] uniquely to patent law," such as the determination of whether there has been a "printed publication" within the meaning of 35 U.S.C. § 102(b), the precedent of the United States Court of Appeals for the Federal Circuit, and its predecessor court

to 'the invention' generally, the anticipation inquiry proceeds on a claim-by-claim basis." Finisar Corp. v. DirecTV Grp., 523 F.3d 1323, 1334 (Fed. Cir. 2008) (citing Hakim v. Cannon Avent Grp., 479 F.3d 1313, 1319 (Fed. Cir. 2007)). "To be anticipatory, [a reference] must . . . describe, either expressly or inherently, each and every claim limitation" <u>Iovate Health Scis.</u>, Inc. v. Bio-Engineered Supplements & Nutrition, Inc., 586 F.3d 1376, 1380 (Fed. Cir. 2009) (citing In re Gleave, 560 F.3d 1331, 1334 (Fed. Cir. 2009)); see also Stored Value Solutions, Inc. v. Card Activation Techs., Inc., 499 F. App'x 5, 14 (Fed. Cir. 2012). A document constitutes a printed publication within the meaning of § 102(b) if it "has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it and recognize and comprehend therefrom the essentials of the claimed invention without need of further research or experimentation." Cordis Corp. v. Boston Scientific Corp., 561 F.3d 1319, 1333 (Fed. Cir. 2009) (quoting In re Wyer, 655 F.2d 221, 226 (C.C.P.A. 1981)); see also Stored Value, 499 F. App'x at 14.

It is undisputed that the provisional application for the '038 Patent was filed on October 20, 2005, and that the critical date for evaluating the parties' "printed publication" arguments is therefore October 20, 2004. Accordingly, to establish that the ZVI Abstract constitutes a "printed publication" within the meaning of § 102(b), IET must show that: (1) more than one year before the October 20, 2005 provisional application filing date for the '038 Patent, the ZVI Abstract was "disseminated or otherwise made available to persons interested and ordinarily skilled in the" environmental remediation "art;" and (2) an examination of the ZVI Abstract

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the Court of Customs and Patent Appeals, controls. <u>See Duro-Last, Inc. v. Custom Seal, Inc.</u>, 321 F.3d 1098, 1106 (Fed. Cir. 2003); <u>S. Corp. v. United States</u>, 690 F.2d 1368, 1370-71 (Fed. Cir. 1982) (en banc) (adopting the decisions of the Court of Customs and Patent Appeals as its own precedent).

would enable one of ordinary skill in the environmental remediation art to practice an embodiment of the claimed invention without undue experimentation.⁵ See Stored Value, 499 F. App'x at 14; Cordis, 561 F.3d at 1333 (quoting In re Wyer, 655 F.2d at 226).

IET argues that the ZVI Abstract was broadly disseminated or otherwise made available, without restriction, to persons interested and ordinarily skilled in the environmental remediation art on five occasions before October 20, 2004: (1) in July 2004, when Dr. Brown emailed the Abstract to the members of the ORTs-3 Scientific Committee, who represented a variety of branches of the environmental remediation field, for their review (Def.'s Ex. 5 at IET 00419-20); (2) in July 2004, when Dr. Brown emailed the ZVI Abstract to Mueller (Mueller Decl. ¶ 6-7); (3) at some point between July 2004 and the start of the Conference, when Mueller emailed the abstracts to several members of the environmental industry who were not members of the Scientific Committee (id. ¶ 10-11); (4) by September 10, 2004, when the full Conference Program -- which identified the ZVI Abstract by its full title -- was available on Dr. Al-Ekabi's company website (Def.'s Ex. 8 at 1; Brown Dep. at 125); and (5) on or before October 9, 2004, when ERM posted a link on its website to a press release announcing ERM's participation in the ORTs-3 Conference and ERM's media webpage contained linked text to a press release stating "ERM shares its experience on oxidation and reduction technologies" (Def.'s Ex. 9 at 1-2).

IET further argues that these events rendered the ZVI Abstract "publically accessible" because: (1) there is no record evidence showing that the Abstract was to be treated as confidential, or that its further distribution or use by recipients was restricted; (2) the Abstract was not intended to be kept confidential because the ORTs-3 Committee reviewers did not

⁵ There is no dispute that any disclosures made at the ORTS-3 Conference itself, or in the post-conference circulation of the full paper developed out of the ZVI Abstract, took place after the October 20, 2004 critical date and therefore cannot be considered with respect to whether there was a "printed publication" within the meaning of § 102(b).

review abstracts in accordance with a traditional peer review process and the review was not an academic exercise (Def.'s Ex. 7 at IET 00064; Def.'s Ex. 8 at 1; Block Dep. at 265-66; Brown Dep. at 14-15, 44-45, 113, 120); and (3) there is evidence that Dr. Brown distributed the Abstract to Mueller, who then further distributed it to individuals who were not members of the Committee (Mueller Decl. ¶¶ 5-7, 10-11).

In response, PeroxyChem argues that there is a genuine issue of material fact as to whether the ZVI Abstract was "publically accessible" within the meaning of § 102(b) because there is a genuine issue of material fact as to whether: (1) "the abstract submitters[] had an expectation or understanding that their abstracts would be kept confidential by the abstract reviewers," notwithstanding the absence of a non-disclosure agreement, because Clayton and Marley averred that there was an "unwritten rule" and "expectation of confidentiality" governing the Committee's review of the abstracts and Dr. Brown testified that he circulated abstracts to the reviewers under a "tasit understanding" [sic] that the abstracts were to be "held confidential" (Clayton Decl. ¶¶ 13-15; Marley Decl. ¶¶ 14, 19, 21; Brown Dep. at 78); (2) Dr. Brown, by emailing the ZVI Abstract to the reviewers, intended for the reviewers to make those abstracts freely available before the ORTs-3 Conference; and (3) any interested person in fact requested or received a copy of the ZVI Abstract -- or any abstract -- from the reviewers before the ORTs-3 Conference.

A. <u>Public Accessibility Legal Standard</u>

"[D]issemination and public accessibility are the keys to the legal determination [as to] whether a prior art reference was 'published." <u>In re Cronyn</u>, 890 F.2d 1158, 1160 (Fed. Cir. 1989) (quoting <u>Constant v. Advanced Micro-Devices</u>, <u>Inc.</u>, 848 F.2d 1560, 1568 (Fed. Cir. 1988)). Indeed, "[b]ecause there are many ways in which a reference may be disseminated to

the interested public, public accessibility has been called the touchstone in determining whether a reference constitutes a printed publication . . . under 35 U.S.C. § 102(b)." <u>In re Lister</u>, 583 F.3d at 1311 (quoting In re Hall, 781 F.2d 897, 898-99 (Fed. Cir. 1986)).

"In general, '[a]ccessibility goes to the issue of whether interested members of the relevant public could obtain the information if they wanted to." Cordis, 561 F.3d at 1333 (quoting Constant, 848 F.2d at 1569). The United States Court of Appeals for the Federal Circuit "ha[s] looked to a variety of factors when considering whether a reference was publically accessible," and this determination is made "on a case-by-case basis based on the 'facts and circumstances surrounding the reference's disclosure to members of the public." In re Lister, 583 F.3d at 1311 (quoting <u>In re Klopfenstein</u>, 380 F.3d 1345, 1350 (Fed. Cir. 2004)); see also id. at 1312 ("[W]e must consider all of the facts and circumstances surrounding the disclosure and determine whether an interested researcher would have been sufficiently capable of finding the reference and examining its contents."). Factors that courts have considered to assess whether a publication was sufficiently publically accessible include: (1) the length of the disclosure; (2) the target audience and the expertise of the target audience; (3) whether the individual who made the disclosure had a reasonable expectation that the publication would not be disseminated further and would remain confidential, (3) "the simplicity or ease with which the material displayed could have been copied," (4) whether the author believed and/or intended that the publication would not be disseminated further; and (5) whether there is evidence that anyone in possession of the publication received a request to share it, or that they in fact shared it. Cordis, 561 F.3d at 1334; In re Klopfenstein, 380 F.3d at 1350.

Although "where a distribution is made to a limited number of entities, a binding agreement of confidentiality may defeat a finding of public accessibility, . . . such a binding legal

obligation is not essential." <u>Cordis</u>, 561 F.3d at 1333. Indeed, "[w]here professional and behavioral norms entitle a party to a reasonable expectation' that information will not be copied or further distributed," the Federal Circuit is "more reluctant" to find that something constitutes a "printed publication." <u>Id.</u> at 1333-34 (quoting <u>In re Klopfenstein</u>, 380 F.3d at 1350-51). Accordingly, although the lack of a nondisclosure agreement is "not determinative," <u>Cordis</u>, 561 F.3d at 1334 n.12, protective measures -- "includ[ing] license agreements, non-disclosure agreements, anti-copying software or even a simple disclaimer informing [individuals] that no copying of the information will be allowed or countenanced" -- "are to be considered insofar as they create a reasonable expectation on the part of the inventor that the displayed information will not be copied." In re Klopfenstein, 380 F.3d at 1351.

As the party challenging the validity of the '038 Patent pursuant to § 102(b), IET bears the burden of demonstrating the public accessibility of the ZVI Abstract by clear and convincing evidence. See Am. Seating Co. v. USSC Grp., Inc., 514 F.3d 1262, 1267 (Fed. Cir. 2008) ("A patent carries a statutory presumption of validity, 35 U.S.C. § 282, so [the defendant has] the burden to show by clear and convincing evidence that the inventors of the [patent] placed their invention in public use more than one year before filing the . . . patent application."). Additionally, as the movant seeking to establish invalidity on summary judgment, IET must demonstrate that "there is no genuine dispute as to any material fact" concerning the ZVI Abstract's public accessibility. See Fed. R. Civ. P. 56(a).

B. Analysis

1. Distribution of the ZVI Abstract

IET argues that Dr. Brown's distribution of the ZVI Abstract to the members of the Scientific Committee, his distribution of the Abstract to Mueller, and Mueller's emailing the

Abstract to members of the environmental industry who were not Committee members rendered the Abstract "publically accessible" within the meaning of § 102(b).

The record contains evidence that, in July 2004, Dr. Brown distributed the ZVI Abstract to the ORTs-3 Committee members as well as to Mueller, who then distributed the Abstract to several members of the environmental industry who were not members of the Scientific Committee. (Def.'s Ex. 5 at IET 00419; Brown Dep. at 112; Haselow Decl. ¶ 16; Mueller Decl. ¶ 6-7, 10-11.) However, Mueller averred in his Declaration that he distributed the Abstract "sometime between when [he] received the abstracts in July 2004 and the" ORTs-3 Conference, which began on October 24, 2004. (Haselow Decl. ¶ 2; Mueller Decl. ¶ 11.) Because the relevant date for determining whether the ZVI Abstract constitutes a "printed publication" is October 20, 2004, and construing the evidence in the light most favorable to PeroxyChem, we must assume that Mueller distributed the abstracts after October 20, 2004. We must therefore conclude for the purposes of the instant Motion that Mueller's distribution of the abstracts did not occur within the relevant time frame, and that this particular distribution does not constitute a "printed publication" within the meaning of § 102(b).

The record also contains Dr. Brown's testimony that: (1) he never requested confidentiality from anyone to whom he distributed the ZVI Abstract; (2) he does not have any recollection of anyone outside of the Committee contacting him and asking him to send an abstract that was under review; and (3) he does not have any recollection of actually sending an abstract that was under review to someone outside of the Committee. (Brown Dep. at 113, 124.) Additionally, Clayton and Marley averred that they did not disclose or discuss the abstracts with anyone who was not on the ORTs-3 Committee, and that they never received a request outside of other members of the ORTs-3 Committee to see any of the abstracts that were under review.

(Clayton Decl. ¶ 16; Marley Decl. ¶ 23.) Indeed, there is no evidence that Dr. Brown ever asked Mueller to distribute the abstracts to individuals who were not members of the Scientific Committee, or that Mueller informed Dr. Brown that he was distributing the abstracts.

Furthermore, there is record evidence that there is an understanding of confidentiality in conference review committees, and that disclosing the contents of an abstract would not have been consistent with professional practice when reviewing abstracts for the purposes of selecting conference presenters. Dr. Brown testified at his deposition that he distributed the abstracts, including his own ZVI Abstract, to the reviewers under a "tasit understanding" [sic] and "professional best practice" that they would be "held confidential." (Brown Dep. at 78.) This understanding was based on his participation in more than 100 professional conferences relating to the remediation of contaminants. (Id. at 16, 78-81.) Dr. Brown further testified that the rationale for the "tasit understanding" [sic] was to protect authors' ability to disseminate their work and inform the industry in the manner they prefer, since "[t]hat . . . is the privilege of the author." (Id. at 78.)

Clayton's and Marley's declarations and Dr. Block's deposition testimony confirm this understanding. Marley averred that "[i]t is an unwritten rule at industry conferences[,] and it was [his] expectation when [he] submitted [his] abstract for review to the ORTs-3 Committee," that the Committee would keep the abstract confidential and "[the] abstract would not be disclosed to or accessible to anyone outside of the ORTs-3 Committee prior to the actual ORTs-3 Conference held in October 2004." (Marley Decl. ¶¶ 14, 19.) Similarly, Clayton averred that, in his experience, "it is a general rule at industry conferences, including the ORTs-3 Conference . . . that the abstract reviewers would keep the abstracts confidential and not disclose the abstracts until the actual conference at which time the work outlined in the abstract would be presented by

the author." (Clayton Decl. ¶ 13.) Clayton further averred that his own practice was to treat the abstracts as confidential. (Id. ¶ 15.) Additionally, Block testified that there is an "understanding of confidentiality" within conference review committees. (Block Dep. at 242.)

The fact that the Committee members did not sign any non-disclosure agreements prior to receiving the abstracts for their review -- <u>i.e.</u>, whether they had a legal obligation to maintain confidentiality -- is not determinative of whether the ZVI Abstract was sufficiently "publically accessible." <u>See Cordis</u>, 561 F.3d at 1335 ("The mere fact that there was no legal obligation of confidentiality . . . [was] not in and of itself sufficient to show that [the inventor's] expectation of confidentially was not reasonable."); <u>see also id.</u> at 1334 n.12. Furthermore, Block's, Clayton's, and Marley's testimony concerning professional and behavioral norms of confidentiality at industry conferences corroborate Dr. Brown's testimony that he expected that the individuals to whom he distributed the ZVI Abstract would keep the Abstract confidential, and that he did not provide the Abstract to anyone who was not a member of the Scientific Committee. <u>See id.</u> at 1333-34. Moreover, credibility issues -- here, for example, deciding whether to credit: (1) Dr.

⁶ We reject IET's argument that Cordis is not applicable to the instant case because: (1) the ORTs-3 Conference was not a purely academic conference; (2) Clayton and Marley's declarations regarding the implicit understanding of confidentiality that reviewers follow when reviewing abstracts appear to concern commercial, industry conferences, not academic conference; and (3) Mueller averred that "one of the central purposes of the [C]onference was to generate revenue." (Clayton Decl. ¶¶ 13-14, 19; Marley Decl. ¶¶ 12-13; Mueller Decl. ¶ 9). Indeed, Cordis does not limit the application of its statement of law that, "[w]here professional and behavioral norms entitle a party to a reasonable expectation' that information will not be copied or further distributed," it is "more reluctant" to find that something constitutes a "printed publication," to purely academic endeavors involving some sort of peer review and editing process, even though, in Cordis, the Federal Circuit happened to apply this law in the context of academic disclosures. See Cordis, 561 F.3d at 1333-34 (quoting In re Klopfenstein, 380 F.3d at 1350-51). Indeed, the district court in Cordis actually applied this law to the commercial disclosures that were also at issue in that case. See Cordis Corp. v. Boston Scientific Corp., Civ. A. No 03-27, 2005 WL 1331172, at *4 (D. Del. June 3, 2005) (concluding that § 102(b)'s "printed publication" bar did not apply when inventor of patent "testified that he expected the companies [to him he distributed monograph] to keep the monograph confidential,

Brown's testimony that he did not provide the ZVI Abstract to anyone outside of the Scientific Committee, and Block's, Clayton's, and Marley's testimony concerning professional and behavioral norms of confidentiality at industry conferences, or (2) Mueller's statement that Dr. Brown gave him a copy of the Abstract in July 2004 -- cannot be resolved on summary judgment and should instead be resolved by the factfinder. See, e.g., Suarez v. City of Bayonne, 566 F. App'x 181, 186 (3d Cir. 2014) ("The District Court's grant of summary judgment amounted to a determination that Suarez's deposition testimony was not credible and that the evidence in the Detectives' favor outweighed that in favor of Suarez, two determinations that it was not permitted to make at summary judgment."); see also Metro. Life Ins. Co. v. Bancorp Servs., L.L.C., 527 F.3d 1330, 1339 (Fed. Cir. 2008) (concluding that summary judgment was inappropriate as a result of a "conflict in declarations"). Because PeroxyChem is the nonmoving party, we must accept the latter testimony as true for the purposes of determining whether there is a genuine issue of material fact as to the public accessibility of the Abstract. See Lamont, 637 F.3d at 179 n.1.

In light of the foregoing, we conclude that there is a genuine issue of material fact as to whether Dr. Brown had a reasonable expectation that the reviewers of the ZVI Abstract would keep the Abstract confidential because there is conflicting evidence as to the underlying factual issues needed to assess his reasonable expectation of confidentiality, specifically: (1) whether

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as it was his perception that confidentiality was an industry practice"). Moreover, there is record evidence that the ORTs-3 Conference did serve an academic purpose because: (1) Haselow averred in his Declaration that the "central purpose" of the ORTs-3 Conference "was to provide a forum for <u>academics</u>, members of research institutions, and industry representatives to share their ideas about new and emerging technologies in the environmental remediation field" (Haselow Decl. ¶ 9 (emphasis added)); (2) Clayton averred that part of the Committee reviewers' responsibility in reviewing abstracts was to ensure that they were not overly commercial (Clayton Decl. ¶ 12); and (3) the Scientific Committee was comprised of individuals who worked for corporations as well as those who worked for the Colorado School of Mines, the University of Waterloo, and Washington State University (Def.'s Ex. 4 at IET 00113).

any Committee reviewer would have distributed, or in fact did distribute, any abstracts, including the ZVI Abstract, and (2) whether any Committee reviewer or similar reviewer "would make the existence of [any abstract] known and would honor requests for public access." See Cordis, 561 F.3d at 1334-35 (concluding that, even though there were no non-disclosure agreements, (1) inventor's distribution of monographs to his academic and research colleagues did not render the monographs "printed publications" within the meaning of § 102(b) because the record contained "clear evidence that . . . academic norms gave rise to an expectation that [the] disclosures would remain confidential;" and (2) inventor had a reasonable expectation that his disclosures of monographs to commercial entities would remain confidential, and the monographs therefore did not constitute "printed publications," when there was no evidence of further distribution of the monographs or of any party in possession of the monographs honoring requests for public access); see also In re Klopfenstein, 380 F.3d at 1350 (stating that, in determining whether material was sufficiently publically accessible so as to constitute a "printed publication," the district court must consider "the existence (or lack thereof) of reasonable expectations that the material displayed would not be copied").

b. Website disclosures

IET also argues that the ZVI Abstract was broadly disseminated or otherwise made available, without restriction, to persons interested and ordinarily skilled in the environmental remediation art: (1) by September 10, 2004, when the full Conference Program -- which identified the ZVI Abstract by its full title -- was available on Dr. Al-Ekabi's company website, www.redoxtech.com (Def.'s Ex. 8 at 1; Brown Dep. at 125); and (2) on or before October 9, 2004, when ERM posted a link on its website to a press release announcing ERM's participation in the ORTs-3 Conference and ERM's media webpage contained linked text to a press release

stating "ERM shares its experience on oxidation and reduction technologies" (Def.'s Ex. 9 at 1-2).

Although Dr. Al-Ekabi's September 10, 2004 email indicated that the ORTs-3 Conference's final program was available on a publically-accessible website, and the final program in evidence lists both Drs. Brown and Block's names next to the full name of the ZVI Abstract, there is no record evidence that anyone ever reached out to either of the Doctors, or anyone else, for a copy of the Abstract. (See Def.'s Ex. 8 at 1, 6-7.) Furthermore, this is not a case in which "any member of the public who submit[ted] a proper request [was] capable of gaining access to the [ZVI Abstract] without any need for special authorization," because any interested member of the public would have had to seek out either Dr. Brown or Dr. Block and specially request the Abstract. See In re Lister, 583 F.3d at 1313 (indicating that the ability of an interested member of the public to access a document without any prior approval weighs in favor of a conclusion that the document was "publically accessible"). Moreover, IET has not submitted evidence showing that individuals interested in environmental remediation would access or rely on www.redoxtech.com for information on this topic. Cf. Voter Verified, Inc. v. Premier Election Solutions, Inc., 698 F.3d 1374, 1380 (Fed. Cir. 2012) (affirming district court's holding that article was publically accessible when article was available on publically-accessible website and there was evidence that this website "was well known to the community interested in" that subject matter). IET also has not submitted any evidence of the number of times the www.redoxtech.com website was accessed in the relevant period prior to October 20, 2004. Additionally, with respect to the linked text on ERM's website, IET has not submitted the actual press release, and the linked text alone is insufficient to render the ZVI Abstract publically accessible because this text contains no information about how an individual interested in the

environmental remediation art might obtain a copy of the Abstract.

We therefore conclude that, construing the evidence in the light most favorable to

PeroxyChem, and recalling that IET bears the burden of demonstrating the public accessibility of

the ZVI Abstract by clear and convincing evidence, see Am. Seating, 514 F.3d at 1267, there is a

genuine issue of material fact as to the fact-specific determination of whether the ZVI Abstract

was "publically accessible" within the meaning of § 102(b). See SRI Int'l, Inc. v. Internet Sec.

Sys., Inc., 511 F.3d 1186, 1195-98 (Fed. Cir. 2008) (reversing district court's grant of summary

judgment to defendants on the basis of invalidity under § 102(b) because there were genuine

issues of material fact as to whether posting of paper to internet server made it sufficiently

accessible to interested individuals). We further conclude, accordingly, that there is a genuine

issue of material fact as to whether the ZVI Abstract constitutes a "printed publication" within

the meaning of § 102(b).

IV. CONCLUSION

For the foregoing reasons, we deny IET's Motion for Partial Summary Judgment on

Count I of the Amended Complaint. An appropriate Order follows.

BY THE COURT:

/s/ John R. Padova

John R. Padova, J.

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